



The fingerprint of a star: HD 84937

HD 84937 is an F2 dwarf star showing significant metal deficiency. With the discovery of the rare 6Li isotope in its spectrum, contributing 5% to the total Lithium abundance, it stirred interest and was adopted as a *Gaia* benchmark star. This poster shows the optical spectrum of HD 84937 obtained with the Potsdam Echelle Polarimetric and Spectroscopic Instrument (PEPSI) of the Large Binocular Telescope (LBT). It plots the normalized intensity as a function of wavelength λ in Angströms (1Å=0.1nm) from the top left corner to the bottom right corner. The PEPSI

spectrum covers the wavelengths between 3820 Å (top left) and 9130 Å (bottom right) with an average spectral resolution of $R=\lambda/\Delta\lambda=220,000$ or approximately 1.4 km/s. Its average dispersion is 0.012 Å/pixel. Integration time with the LBT was 10 min, and 1 hr on the VATT, and consists of 2-5 exposures in all six cross dispersers. The signal-to-noise ratio (S/N) of the spectrum peaks at 250:1 at 7000 Å and has a low of 20:1 near the blue cutoff. The bluest part appears underexposed and we omitted it from the poster. The exposure was obtained on April 2,

2015. A subset of spectral absorption lines is identified in the graphics and marked with dashes beneath the spectrum. The annotation indicates the chemical element (e.g., Fe for iron), the ionization state (I for a neutral line, II for an ionized line), and the wavelength in Angström. The original spectrum has been published in *Astronomy & Astrophysics* (Strassmeier, K. G., Ilyin, I., & Weber, M. 2018, A&A, 612, A45; see <https://pepsi.aip.de/>).

